

DIAGNOSTIC ULTRASONIC IMAGING SYSTEM HAVING COMBINED SCANHEAD  
CONNECTIONS

ABSTRACT OF THE DISCLOSURE

A diagnostic ultrasonic imaging system includes a scanhead having a plurality of transducer elements. A signal combiner, such a time-division multiplexer or a frequency-division multiplexer, is coupled to each of the transducer elements. The signal combiner combines the signals from the transducer elements into a composite signal and couples the composite signal to an ultrasonic processor through a wire or other communication link. A signal separator, such as a time-division demultiplexer or a frequency-division demultiplexer, is coupled to the link and recovers from the composite signal each of the signals from the transducer elements.